

REMARKS/ARGUMENTS

Claims 1-19 are pending in the application.

In Applicants' previous amendment filed 17 May 2007, claim 1 was amended merely to clarify that the previous language "wherein free ends of said hollow domes are provided with openings" means that it is only the free ends of the hollow domes 7 that are provided with the openings 8 (see the drawings and the description in the specification, for example on page 4, line 16, and on page 7, lines 4 – 9).

With the present amendment, a new claim 18 is being submitted that further defines the flow of the exhaust gas in the housing as being diverted in the area of the openings at the free ends of the hollow domes by approximately 180°. Support for this feature can be found, for example, on page 7, lines 24 – 26.

In addition, a new independent claim 19 is being submitted for defining the flow gap 13 between the free ends of the hollow domes and the opposite walls in greater detail. In particular, claim 19 includes the additional feature that the free ends of the hollow domes extend nearly to the oppositely disposed wall while forming a flow gap of about 2 to 3 mm. Support for this feature can be found in originally filed claim 7 as well as on page 8 of the specification, lines 15 and 16.

The patentability of Applicants' claim 1 was supported in great detail in Applicants' previous amendment of 17 May 2007.

With regard to new claim 18, the diversion of the flow of exhaust gas in the region of the openings at the free ends of the hollow domes by approximately 180° results in high flow velocities in the region of diversion. These high flow velocities cause transverse or cross flow between the hollow domes, resulting in a uniform charging of

the surfaces of the walls of the catalytic converter. With the primary reference to Jourdan, the exhaust gas flow is deflected only slightly as it exits one liner and enters the adjacent liner. In particular, as can be seen by the red arrows in the drawing attached to Applicants' 17 May 2007 amendment, any deflection here is significantly less than 90°. Certainly no deflection of approximately 180° is shown. Thus, it is respectfully submitted that the subject matter of Applicants' new claim 18 is in no way suggested by Jourdan.

Pursuant to new claim 19, the free ends of the hollow domes extend nearly to the oppositely disposed wall of the housing, wherein a flow gap is formed between the free ends of the hollow domes and the oppositely disposed wall; this flow gap has a width of about 2 to 3 mm. In contrast, in Jourdan a large space is provided between the closed end of the liner and the opposite wall of the housing. Since no opening is provided at the free ends of the liners of Jourdan, the flow gap is not formed between the free ends of the liners and the opposite wall of the housing, but rather between the peripheral surfaces of adjacent liners. As a result, and also due to the longitudinal openings 26 only on the sides of the liners 25 of Jourdan, there is formed a fundamentally different flow path, as can be clearly seen by the red arrows in the drawing attached to Applicants' previous amendment. It is respectfully submitted that there is no suggestion at all in Jourdan for forming a flow gap between the free ends of hollow domes and an oppositely disposed wall, with such flow gap being approximately 2 to 3 mm, in other words very narrow, all as required by Applicants' claim 19. Applicants' narrow flow gap produces a very high flow velocity and a thin boundary layer. This achieves a good contact of the exhaust gas with the catalytically active surface material on the housing

walls. In contrast, with Jourdan the catalytic conversion is not achieved by contact with a catalytically active surface, but rather by having flow of gas take place through a catalytically impregnated material. For this reason, Jourdan is not concerned with, nor does it suggest, how to achieve an advantageous flow of exhaust gas over a catalytically active wall surface.

In view of the foregoing discussion, it is respectfully submitted that all of pending claims 1 – 19 are patentable over the cited references. Should the Examiner have any further comments or suggestions, the undersigned would very much welcome a telephone call in order to discuss any outstanding issues and to place the application into condition for allowance.

Respectfully submitted,

/Robert W. Becker/

Robert W. Becker, Reg. 26,255
Attorney for Applicants

ROBERT W. BECKER & ASSOCIATES
707 State Hwy 333, Ste. B
Tijeras, New Mexico 87059-7507

Telephone: 505 286 3511
Telefax: 505 286 3524

RWB:mac